

1. A munitions trailer comprising:

- a main deck;
- a wheeled frame including a central beam connected to the main deck;
- said main deck having a forward deck, a middle deck and an aft deck;
- said forward deck and middle deck separated by a forward deck opening;
- said middle deck and aft deck separated by an aft deck opening;
- a forward door set for closing the forward deck opening and movable between a closed position closing the forward deck opening and an open position uncovering the forward deck opening;
- an aft door set for closing the aft deck opening and movable between a closed position closing the aft deck opening and an open position uncovering the aft deck opening.

2. The munitions trailer of claim 1 wherein:

- said forward door set is flush with the main deck when in the closed position and including mounting structure attached to the forward door set and exposed for use when the forward door set is in the open position for securing munitions supporting structure;
- said aft door set being flush with the deck when in the closed position, and including mounting structure attached to the aft door set and exposed for use when the aft door set is in the open position for securing munitions supporting structure.

3. The munitions trailer of claim 2 wherein:

- said mounting structure attached to the forward door set includes a pair of parallel lateral mounting rails attached to the forward door set;

said mounting structure attached to the aft door set including a pair of parallel lateral mounting rails attached to the aft door set.

4. The munitions trailer of claim 1 wherein:

said middle deck includes a forward middle deck section and a rear middle deck section spaced from the forward middle deck section by a middle deck opening;

a middle door set for closing the middle deck opening and movable between a closed position closing the middle deck opening and an open position uncovering the middle deck opening.

5. The munitions trailer of claim 4 wherein:

said forward door set is flush with the main deck when in the closed position and including mounting structure attached to the forward door set and exposed for use when the forward door set is in the open position for securing munitions supporting structure;

said aft door set is flush with the deck when in the closed position, and including mounting structure attached to the aft door set and exposed for use when the aft door set is in the open position for securing munitions supporting structure;

said middle door set is flush with the deck when in the closed position, and including mounting structure attached to the middle door set and exposed for use when the middle door set is in the open position for securing munitions supporting structure.

6. The munitions trailer of claim 5 wherein:

said mounting structure attached to the forward door set includes a pair of parallel lateral mounting rails attached to the forward door set;

said mounting structure attached to the aft door set including a pair of parallel lateral mounting rails attached to the aft door set;

said mounting structure attached to the middle door set including a pair of parallel lateral mounting rails attached to the middle door set.

7. The munitions trailer of claim 6 wherein:

a front set of wheels and a rear set of wheels attached to the frame;

frame including a tow bar and Ackerman steering geometry structure connecting the front and rear set of wheels to the tow bar.

8. The munitions trailer of claim 6 including:

tie down mechanisms attached to the deck.

9. The munitions trailer of claim 6 including:

a plurality of bulkheads connected to the main beam and connected to the forward, middle and aft decks to support the decks.

10. The munitions trailer of claim 6 including:

a plurality of long bodied munitions chocks releasably attachable to the mounting rails on the door sets in the open position.

11. The munitions trailer of claim 10 including:

at least one missile rack releasably attachable to the mounting rails on the door sets in the open position.

12. A munitions trailer convertible between a closed deck configuration for general transport usage and a choice of open deck configurations for transport of long bodied munitions, comprising:

a trailer frame having a front set of wheels and a rear set of wheels;

a main deck mounted on the frame;

said main deck divided into deck portions including a forward deck, a middle deck and an aft deck;

said forward deck and middle deck spaced apart by a forward deck opening spanning the width of the main deck;

said middle deck and aft deck spaced apart by an aft deck opening spanning the width of the main deck;

said frame including a main beam connecting the forward, middle and aft decks;

a forward door assembly connected between the forward deck and the middle deck, movable between a closed position covering the forward deck opening, and an open position uncovering the forward deck opening permitting substantially unobstructed access through the forward deck opening for purposes of loading and unloading long bodied munitions;

an aft door assembly connected between the middle deck and the aft deck, movable between a closed position covering the aft deck opening, and an open position uncovering the aft deck opening permitting substantially unobstructed access through the aft deck opening for purposes of loading and unloading long bodied munitions;

each door assembly including a first door hinged to a deck portion, and a second door hinged to a next deck portion, each door movable between a closed position in partially covering relationship to the deck opening, and an open position uncovering the deck opening and lying flat on the surface of the connected deck;

each door having at least one mounting rail that is accessible when the door is in the open position for the purpose of mounting cradle structure for holding a segment of a long bodied munitions item.

13. The munitions trailer of claim 12 wherein:

each door has a pair of said lateral mounting rails.

14. The munitions trailer of claim 12 wherein:

said middle deck is divided into a forward middle-deck section and an aft-middle deck section, said forward middle-deck and aft middle-deck sections being spaced apart by a middle deck opening;

a middle door assembly connected between the forward middle-deck section and the aft middle-deck section, movable between a closed position covering the middle deck opening, and an open position uncovering the middle deck opening permitting substantially unobstructed access through the middle deck opening for purposes of loading and unloading long bodied munitions.

15. The munitions trailer of claim 14 wherein:

the doors are flush with the deck when in the closed position.

16. The munitions trailer of claim 14 wherein:

said forward door assembly doors are flush with the main deck when in the closed position and including mounting structure attached to the forward doors and exposed for use when the forward doors are in the open position for securing munitions supporting structure;

said aft door assembly doors are flush with the main deck when in the closed position, and including mounting structure attached to the aft doors and exposed for use when the aft doors are in the open position for securing munitions supporting structure;

said middle door assembly doors are flush with the main deck when in the closed position, and including mounting structure attached to the middle doors and exposed for

use when the middle doors are in the open position for securing munitions supporting structure.

17. The munitions trailer of claim 16 including:

a plurality of bulkheads connected to the main beam and connected to the forward, middle and aft decks to support the decks.

18. The munitions trailer of claim 17 including:

tie down mechanisms attached to the deck.

19. A munitions trailer comprising:

a first flat deck;

a second flat deck longitudinally spaced from the first deck by a first deck opening;

a third flat deck longitudinally spaced from the second deck by a second deck opening;

a trailer frame including a main beam having segments connecting the first deck to the second deck and the second deck to the third deck;

a first door set having first and second doors connected between the first and second decks, one door pivotally connected to a trailing edge of the first deck, the other door pivotally connected to a leading edge of the second deck such that the doors are movable between a closed position covering the first deck opening, and an open position uncovering the first deck opening;

a second door set having first and second doors connected between the second and third decks, one door pivotally connected to a trailing edge of the second deck, the other door being pivotally connected to a leading edge of the third deck such that the

doors are movable between a closed position in covering relationship to the second deck opening, and an open position uncovering the second deck opening.

20. The munitions trailer of claim 20 including:

a fourth flat deck spaced from the third deck by a third deck opening;

a main beam segment connecting the fourth deck to the third deck;

a third door set having first and second doors connected between the third and fourth decks, one door pivotally connected to a trailing edge of the third deck, the other door being pivotally connected to a leading edge of the fourth deck such that the doors are movable between a closed position in covering relationship to the third deck opening, and an open position uncovering the second deck opening;

said door sets being flush with the decks when in the closed position.

21. The munitions trailer of claim 20 including:

a plurality of bulkheads connected to the main beam and connected to the forward, middle and aft decks to support the decks.

22. The munitions trailer of claim 21 including:

mounting structure attached to the doors on a side of the door that faces up when the door is in the open position for securing structure to hold long bodied munitions items.